

# **Towngas Smart Energy**

## **(1083.HK)**

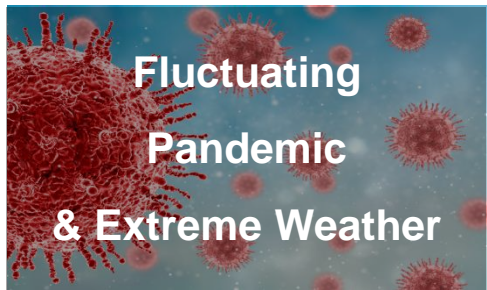
# **FY2022 Annual Results**

**16 March 2023**

## 2022 Review



- Energy costs surged
- Gas source supply under tension



- Weak demand for natural gas
- Dollar margin narrowed



- Distributed PV from 0 to 1
- Secure industrial parks contracts



## Embrace Brightening Future



- Mild energy prices volatility
- Stabling gas sources supply



- Rebounding demand for natural gas
- Dollar margin increasing




- Seize share in industrial parks and expedite grid connection
- Realise profits in carbon/green power trading




## City-gas

### Gas Sales Volume


**15.25** billion m<sup>3</sup>  **5%**

Note: Excluding Shanghai Gas


### City Gas Projects

**183** projects  **7** new projects

### Customers

**15.93** million  **840,000** new customers

### Dollar Margin

**0.50** RMB  **0.01** RMB



## Renewable Energy

### Accumulative

**80** zero-carbon industrial parks

### PV (As at March 2023)

Contracted: **1.8** GW

Grid-connected: **1** GW

# ESG



## Symposium Covering All Aspects of E, S and G

### Corporation



The Secretary for Environment and Ecology of the HKSAR Government, Mr. Tse Chin-wan, officiated at the ceremony



Summit – Over 20 experts and scholars took turns to speak on ESG-related hot topics

Approximately **5,000** people attended online and onsite  
Well-known professionals and scholars in the political, business and academic sectors from public utilities, financials investment, social welfare and corporate governance gave speeches and participated in round-table discussion

## Responding to Risks Related to Sustainable Development



**Climate-related and Nature-related Directive Guide**  
The first company in Hong Kong to adopt the TNFD framework in ESG-related risk disclosures



**TCFD & TNFD**  
Referenced both frameworks in responding to climate and nature-related risks and opportunities, as well as the impact of future operational plans on climate change and ecosystems

### The TNFD Forum

**TNFD Forum**  
Joined TNFD Forum, becoming one of the 800+ members of the global multi-disciplinary consultative group of institution

# Continuous Promotion of ESG Development and Garner International Recognition

## Significantly improved in 3 ESG ratings

**S&P Global**

Overall Rating			
2019	2020	2021	2022
15	19	43	68

Significantly improved

**MSCI** 

Upgraded to “A” in 2022

**CDP**  
DISCLOSURE INSIGHT ACTION

Attained “B” on climate change for the first time

## Major awards and recognition

**Bloomberg Businessweek** **ESG** Leading Enterprise Awards 2022  
 彭博商業周刊 / 中文版

**Bloomberg Businessweek / Chinese Edition**  
 ESG Leading Enterprise Awards and Asset Management Institutions Awards



**Centre for Business Sustainability (CBS), The Chinese University of Hong Kong**  
 No.1 of the Greater Bay Area Business Sustainability Index and the Hong Kong Business Sustainability Index



HKQAA

## Hong Kong Green and Sustainable Finance Awards 2022

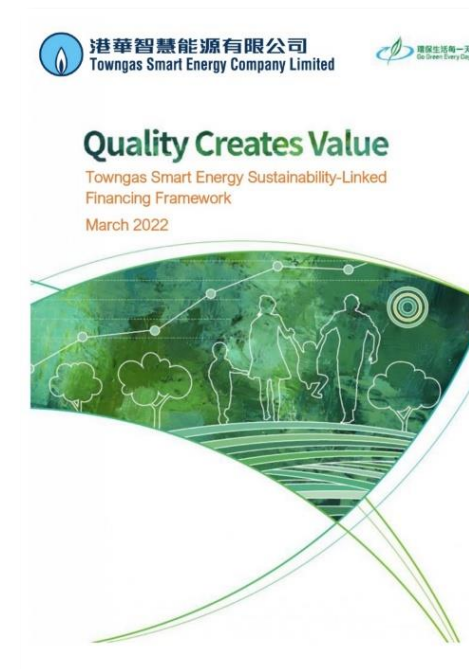
Towngas Smart Energy (1083.HK) won:  
“Outstanding Award for Green and Sustainable Bond Issuer –  
(Smart Energy) Largest Single Sustainability Linked Bond” award



The Asset

## The Asset Triple A Sustainable Capital Markets Awards 2022

The group issued US\$200 million sustainability-linked bond and won:  
“Best Sustainability-Linked Bond” award



# AGENDA

---

<b>Financial Highlights</b>	<b>P.9</b>
<b>Business Review</b>	
▪ <b>Gas Business</b>	<b>P.12</b>
▪ <b>Smart Energy</b>	
○ Renewable Energy	P.19
○ “Gas+” Energy Management	P.28
▪ <b>Business Guidance</b>	<b>P.32</b>





# Financial Highlights

# FY2022 Annual Results – Towngas Smart Energy (1083.HK)

(Unit: HK \$ million)	2021	2022	Changes	
<b>Revenue</b>				
▪ Piped Gas & Energy Sales	13,951	16,664	↑	19%
▪ Connection Fees	2,429	2,412	↓	1%
▪ Extended Businesses	745	997	↑	34%
	17,125	20,073	↑	17%
<b>Operating Profit</b>	2,121	1,656	↓	22%
<b>Corporate Financial Expenses</b>	(509)	(633)	↑	24%
<b>Operating Net Profit</b>	1,612	1,023	↓	37%
<b>Share of Loss of Shanghai Gas</b>	-	(589)		-
<b>Change in Fair Value of Embedded Derivative Component of Convertible Bonds</b>	(359)	531		-
<b>Profit Attributable to Shareholders</b>	1,253	965	↓	23%
<b>Basic Earnings per Share (HK Cents)</b>	41.53	30.17	↓	27%
<b>Interest Coverage Ratio</b>	6.1x	4.3x		-

(Unit: HK \$ billion)	31 Dec 2021	31 Dec 2022
<b>Total Assets</b>	54.2	52.9
<b>Net Assets</b>	25.2	23.9
<b>Cash and Bank Balances</b>	4.1	4.0
<b>Total Borrowings</b>	19.5	19.7
<b>Net Gearing Ratio*</b>	37.9%	39.7%
<b>Headquarter Average Cost of Debt</b>	3.9%	3.8%

**Credit Rating:** **MOODY'S** : **Baa1** **S&P Global** Ratings : **BBB+**

\*Note: After exiting from Shanghai Gas, the net gearing ratio will drop to around 30%

# BUSINESS REVIEW

- **Gas Business**
- **Smart Energy**
  - **Renewable Energy**
  - **“Gas+” Energy Management**



# Steady Improvement in Operating Scale Despite the Impact of the Pandemic

## Total Gas Sales Volume \*

Total

**15.25** billion m<sup>3</sup>  **5%**

Dollar Margin

**0.50** RMB  **0.01** RMB

## City-gas Projects

**183** projects

 **7** new projects

## Customers

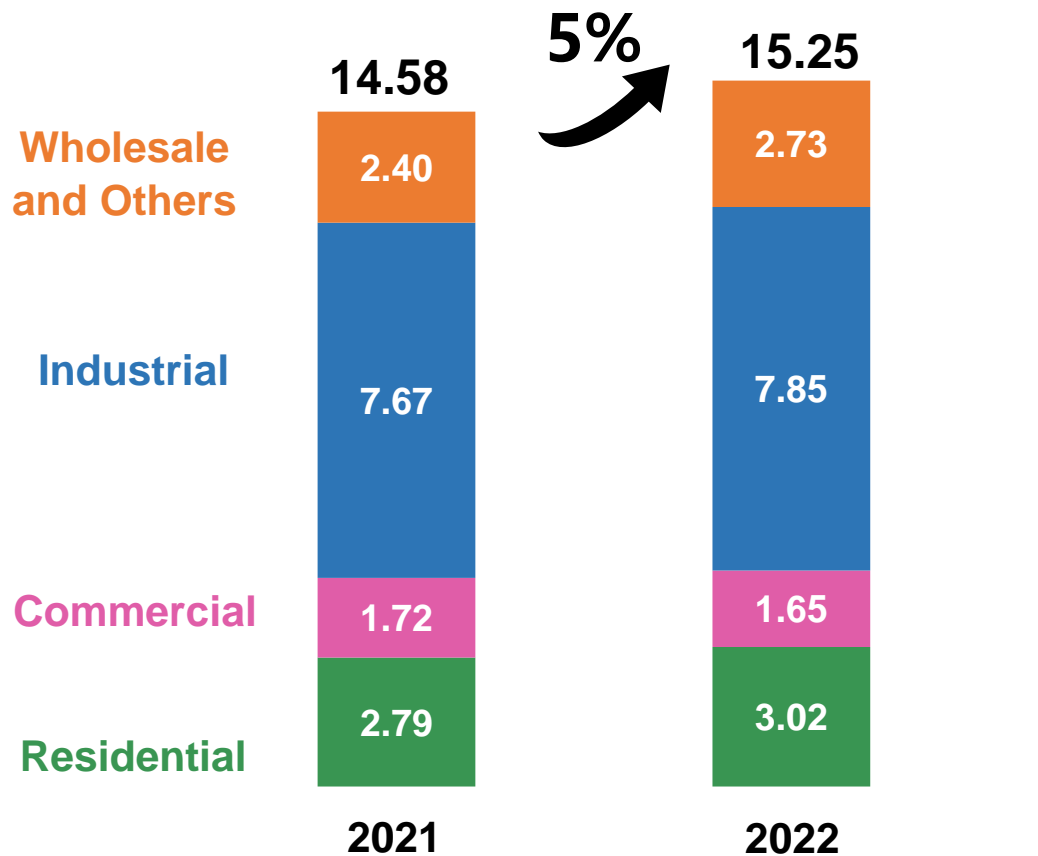
**15.93** million

 **840** thousand  
new customers

\* Note: Excluding Shanghai Gas

## Gas Sales Volume

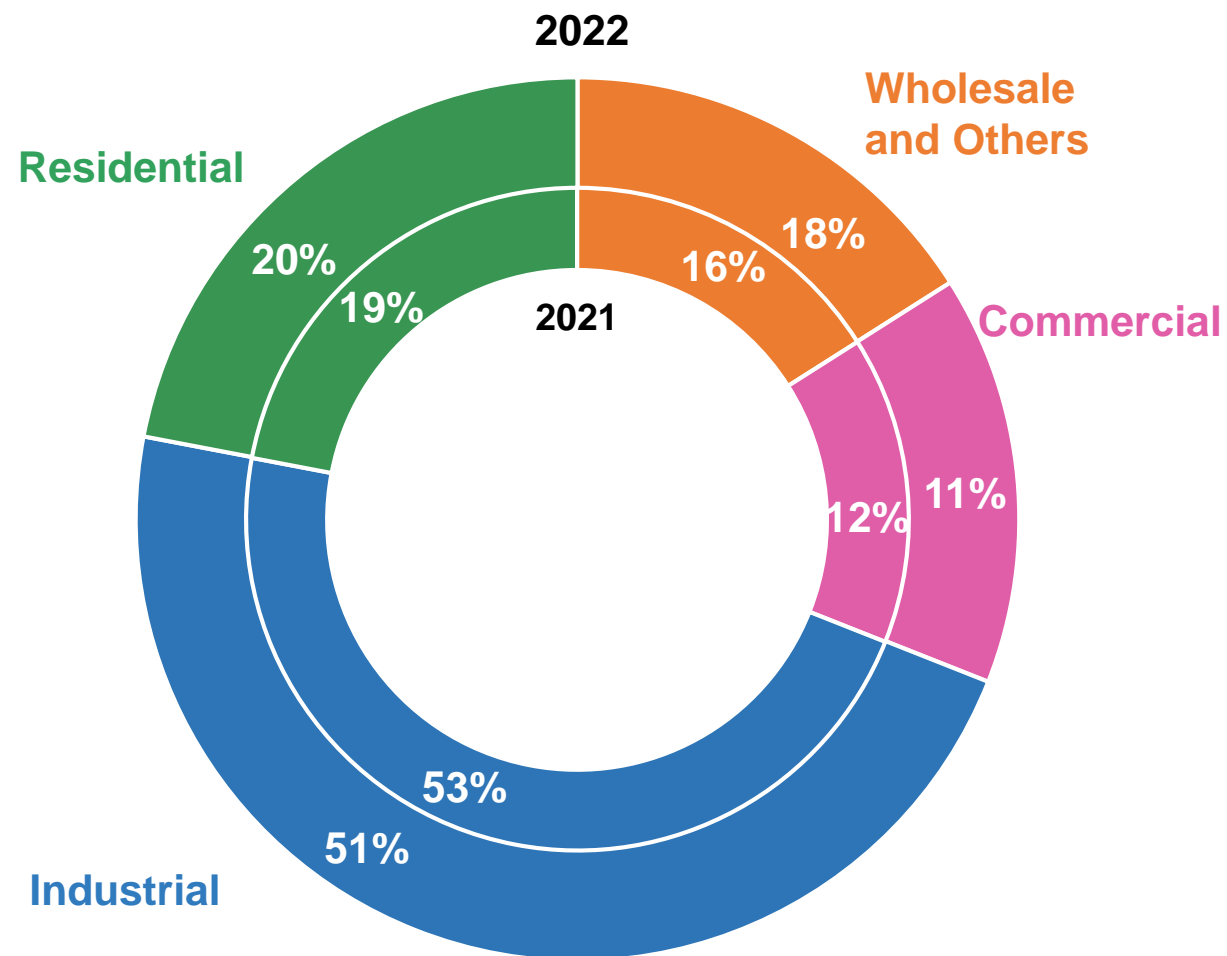
(Unit: billion m<sup>3</sup>)



FY2022 National Natural Gas Consumption

↓ 1.7% YoY

## Gas Sales Mix



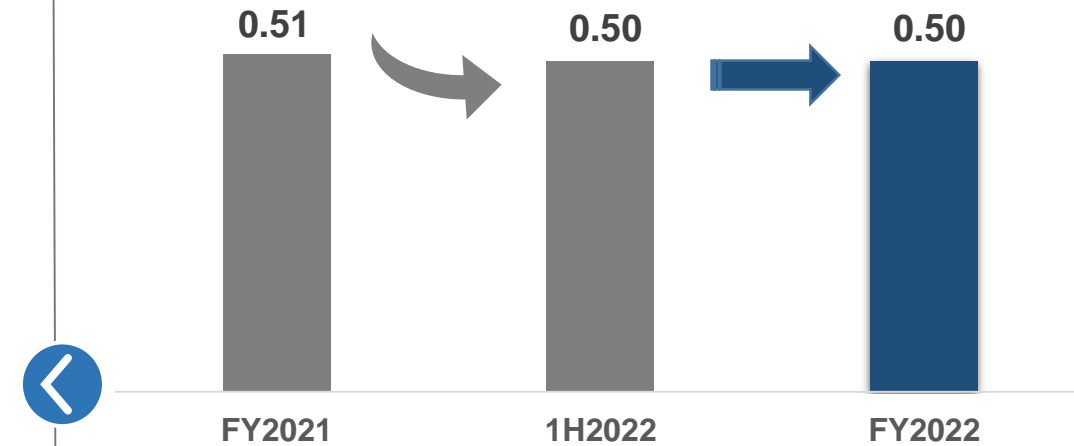
# Upstream Gas Cost Surged Sharply, Dollar Margin Gradually Stabilised

## Selling Price, Cost and Dollar Margin

(Unit: RMB/m <sup>3</sup> )		2021	2022	Changes
<b>Selling Price</b>	Residential	2.65	2.71	↑ 0.06
	Commercial	3.11	3.46	↑ 0.35
	Industrial	2.94	3.74	↑ 0.80
	Wholesale	2.83	3.27	↑ 0.44
<b>Average Selling Price</b>		2.90	3.49	↑ 0.59
<b>Average Gas Cost</b>		2.39	2.99	↑ 0.60
<b>Dollar Margin</b>		0.51	0.50	↓ -0.01

## Dollar Margin Trend

(Unit: RMB/m<sup>3</sup>)



- Gas cost improvement by sourcing non-Three Major gas sources.
- The average gas purchasing price in 2022 increased by 0.60 RMB/m<sup>3</sup> compared with 2021.
- Cost pass through and subsidies offset 0.59 RMB/m<sup>3</sup>.

# Enhance the Commercial Value of the Group's Superior Resources and Gas Source Distribution Capability

## Capability of self-managed gas source coordination

2022: ≈1 billion m<sup>3</sup>    ↗ 2023: estimated to reach 2 billion m<sup>3</sup>, reducing the gas supply cost by 0.1 RMB/m<sup>3</sup>

- Domestic resources
- Import resources
- Invested resources



**Speed up project construction and secure LNG import by long-term contracts**

- Will be in operation in mid-2023.

**Accelerate project construction and unleash production capacity gradually**

- Phase I will be in operation in mid-2023.

**The commercial function of Jintan Gas Storage Tank gradually unleashed**

- **Trade volume increased:** the volume of trade was 400 million m<sup>3</sup> in 2022, achieving three times of gas storage turnover, and is expected to increase to 600 million m<sup>3</sup> in 2023.
- **Diversified business types:** storage trading, storage services, gas sales, etc.

Note: HKCG Group

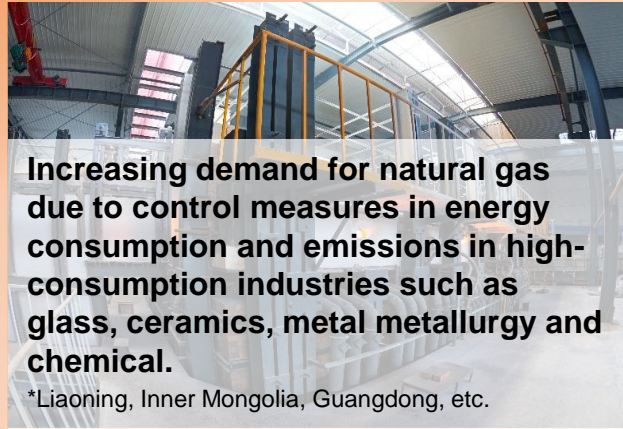




# National Natural Gas Consumption and the Proportion to One-off Consumable Energy Continue to Rise

The proportion of amount of national natural gas consumption to one-off consumable energy continue to rise from 8.5% in 2022 to 15% in 2040.

## Industrial Customers



Increasing demand for natural gas due to control measures in energy consumption and emissions in high-consumption industries such as glass, ceramics, metal metallurgy and chemical.

\*Liaoning, Inner Mongolia, Guangdong, etc.

## Commercial Customers



LPG cylinder-to-pipeline conversion continues to progress, backing a safe urban development.

\*Coastal cities such as those in Eastern China and Southern China

## City Gas New Projects



Gradual set up of renewable energy industries such as PV, power battery, electric vehicle, etc., bringing increasing demand.

\*Jiangsu, Anhui, Jiangxi, Guangdong, Guangxi, etc.



Multiple means in C&I clean space-heating contributing to improving urban living standards.

\*Cities in the mid-and downstream of the Yangtze River and Northern China



Strategic cooperation with SOEs, continue to explore the potential of city gas projects.

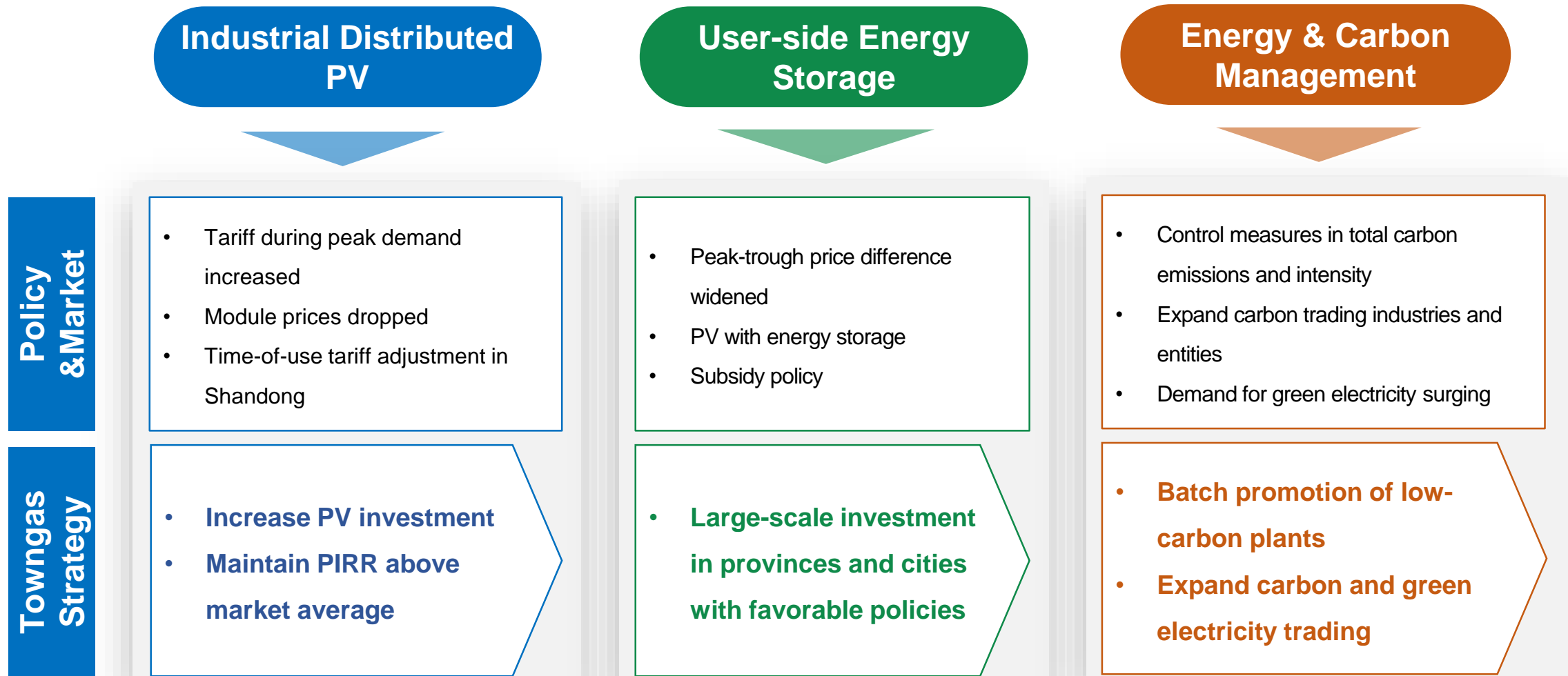
\*Anhui, Jiangxi, Guangdong, Liaoning, Inner Mongolia

- **On 16 March 2023, TSEL entered into a legally binding MOU with Shenergy Group and Shanghai Gas, pursuant to which the Parties agreed to the exit of TSEL from its entire investment of 25% equity interest in Shanghai Gas.**
- **The consideration payable to TSEL for the Exit is to be agreed between the Parties to the MOU based on a valuation of Shanghai Gas as at 28 February 2023 to be conducted by a valuer and approved by the required governmental supervisory authority. Pursuant to the MOU, from 1 March 2023, TSEL ceased to have any rights and responsibilities of Shanghai Gas.**
- **will establish deep and solid strategic relationships in the fields of, among others, natural gas resources and supply chain, renewable energy business, extended services, energy, and low-carbon technology.**

# BUSINESS REVIEW

- **Gas Business**
- **Smart Energy**
  - **Renewable Energy**
  - **“Gas+” Energy Management**

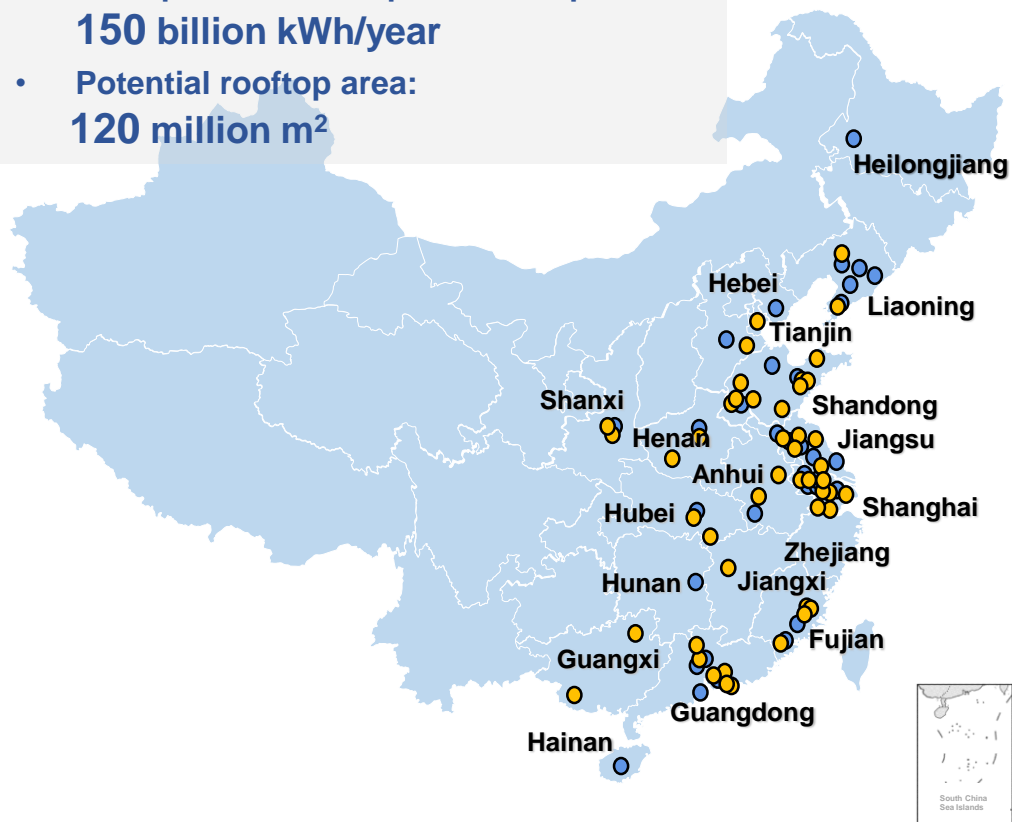
# Positive Policy Environment Supports Prosperous Achievements in 2023





## Zero-carbon Industrial Parks (80)

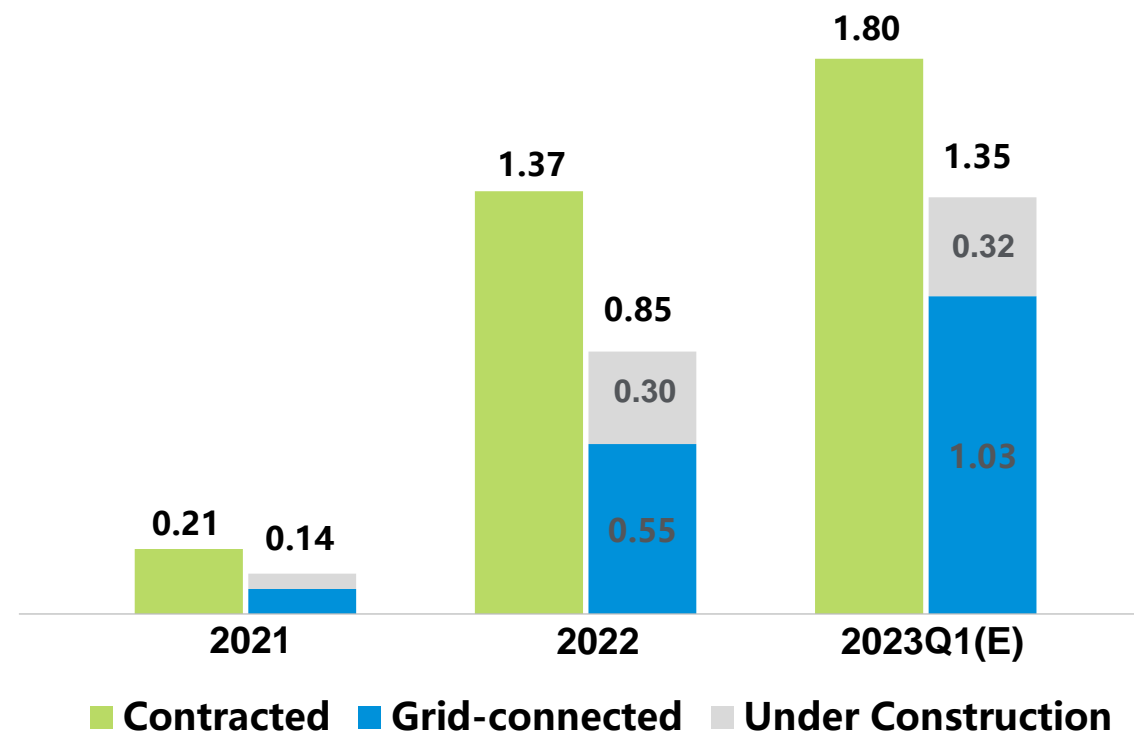
- Total power consumption in the parks: **150 billion kWh/year**
- Potential rooftop area: **120 million m<sup>2</sup>**



• **48** newly increased in 2022

## PV: Accumulative Contracted and Grid-connected (GW)

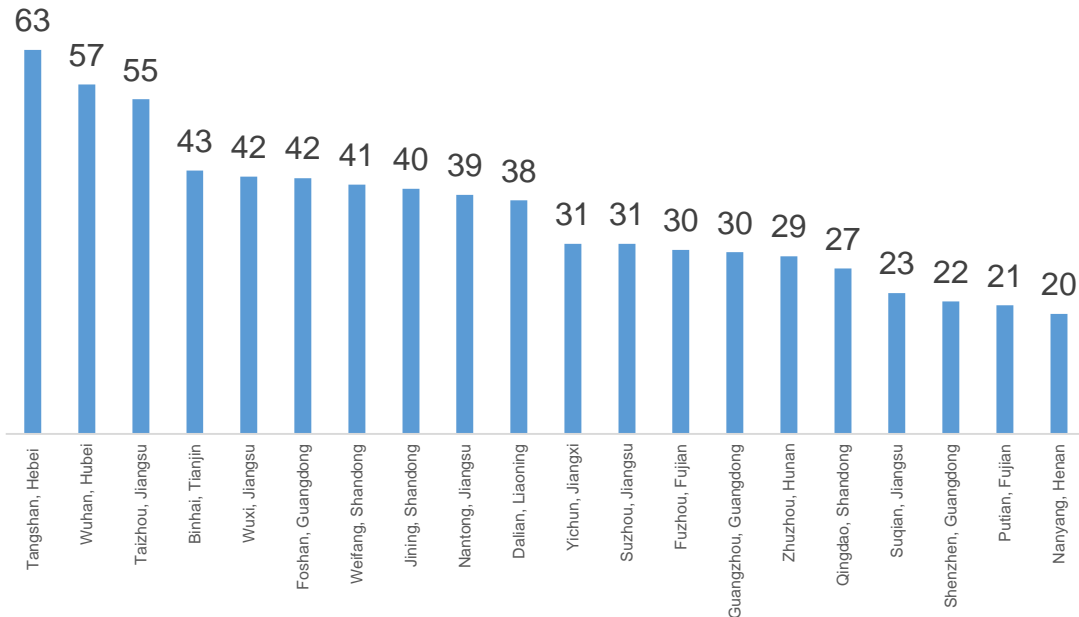
- Number of contracted clients: > 500
- Industry-leading growth in scale in 2022



*Note: Contracted clients include those under construction and grid-connected*

## Average Contract Capacity > 30MW (Industrial Parks established for 1 year )

Top 20 Industrial Parks  
Ranked by Contract Capacity (MW) \*



- Average established period: **11 months**
- Average contracted scale: **36MW**

\*Note: Data as at 31 December 2022

## Key Success Factors

- **Marketing**: Government support, gas synergy
- **Service**: Carbon management, energy efficiency management, green power trading
- **Engineering**: GW-grade construction, operation and maintenance management
- **Risk Management**: Compliance process, professional teams, efficient tools
- **Intelligence**: Management platform, PV cloud, device cloud

**Average PIRR >10%**  
(Projects in operation for over 6 months)

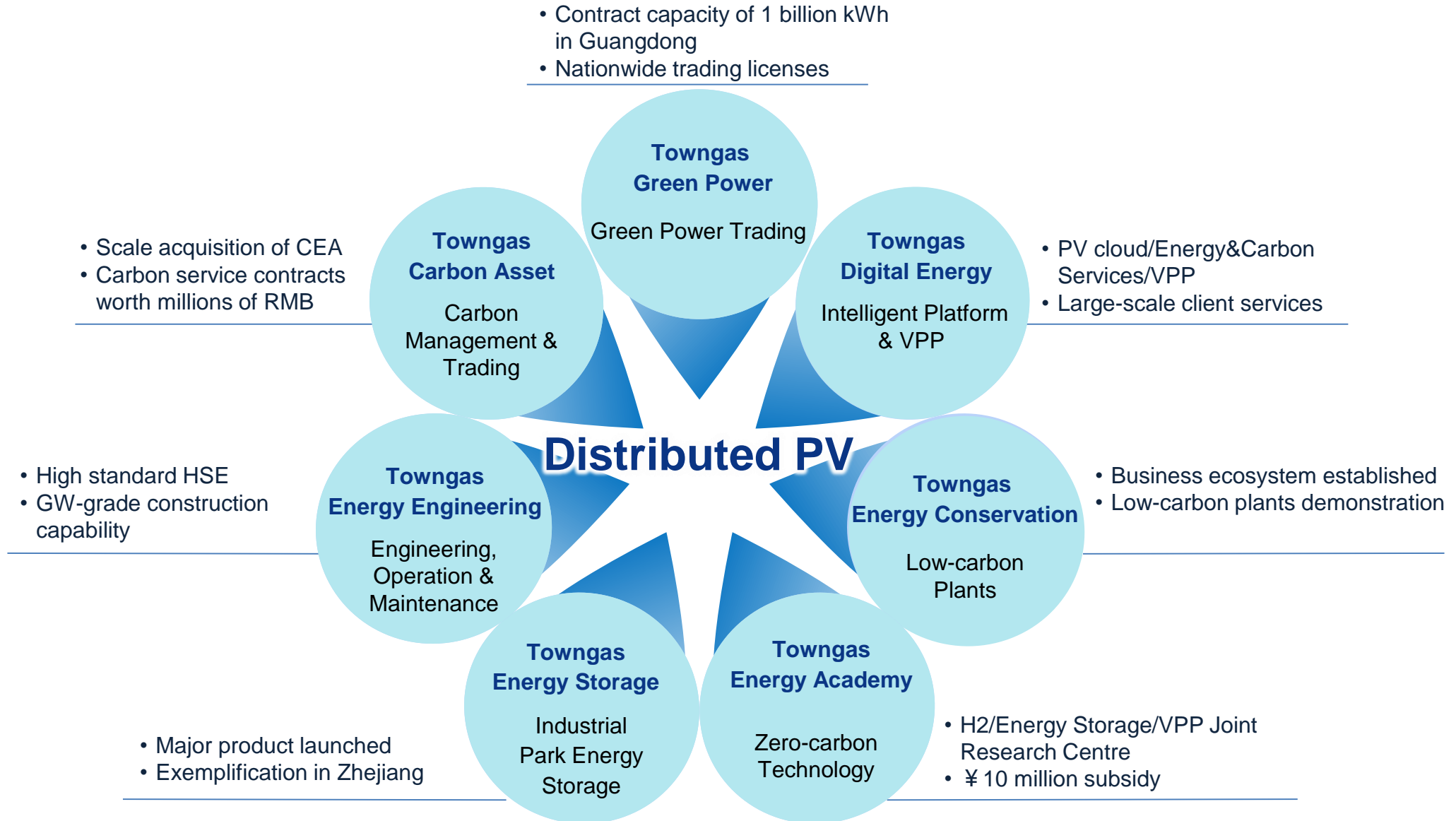
**PIRR of Industrial Park Model Outperformed**

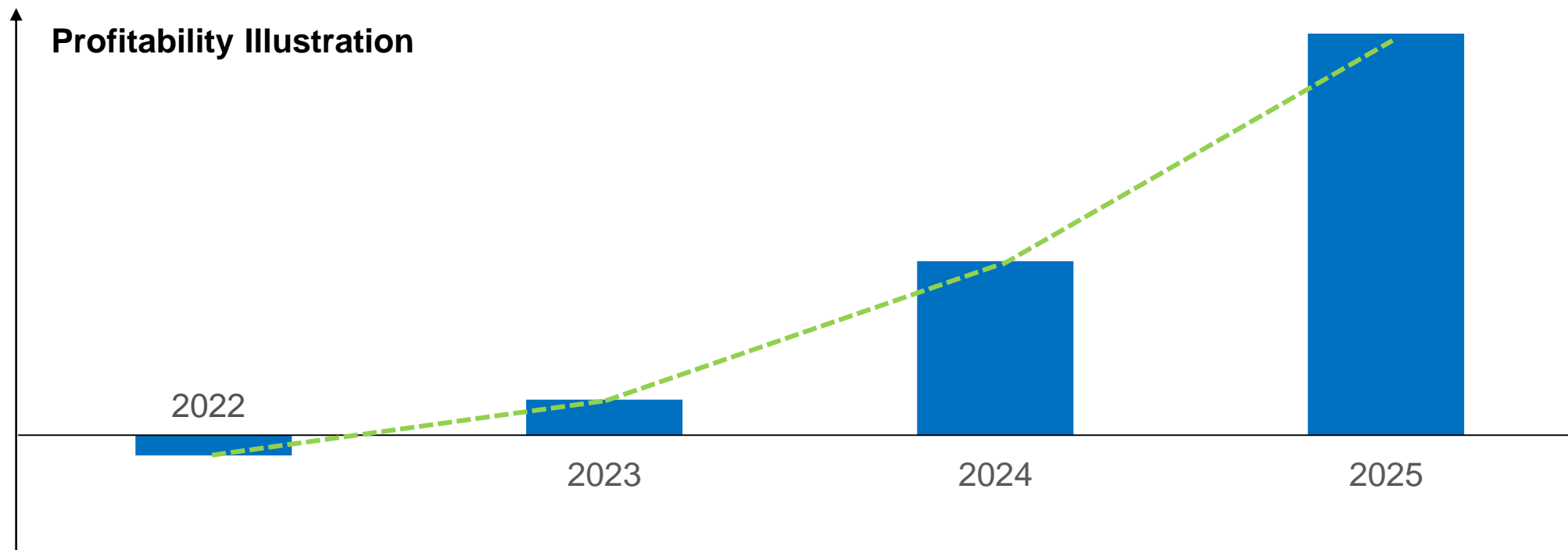
	TSEL	Market
<b>PV Tariff</b>	✓ High (PV+Service, Strong Bargaining Power)	PV only
<b>Development Cost</b>	✓ Low (Independent Batch Development)	3 <sup>rd</sup> party Development
<b>Procurement Cost</b>	✓ Low (Joint Procurement)	Individual Project Procurement
<b>Operating and Maintenance Efficiency</b>	✓ High (Industrial Park-centric)	Dispersed

**Policy & Market Favor Return of Projects**

- PV module prices dropped
- Peak tariff increased
- Cross-premise power trading
- Time-of-use tariff adjustment in Shandong (short-term impact)

# Establish A Leading One-stop Energy Management Enterprise





<b>PV Grid-connected *</b>	• Only 0.1GW of annualised effective grid-connected due to pandemic	• >1.2GW of annualised effective grid-connected	• >3.5GW of annualised effective grid-connected	• >6GW of annualised effective grid-connected
<b>Energy/Carbon Services</b>	• Capability building with capital investment	• Generate primary profits by clients accumulation	• Realise profits in scale with expanded client base	• Develop VPP
<b>Personnel Deployment</b>	• Key energy professionals	• Key professionals related to industrial parks	• Professionals in place, productivity enhanced	• Network of 200 zero-carbon industrial parks

\*PV Grid-connected : Refers to annualised effective grid-connected, which equals to the scale of PV operated for a full year.

## Zero-carbon Industrial Park - Hailing, Taizhou



### Low-carbon Development in Top 100 Industrial Districts

- Intelligent energy/carbon management
- *2022 Topics in Focus*

## Near-zero Carbon Business - Futian, Shenzhen



### Near-zero Carbon Business District in the Greater Bay Area

- VPP demonstration
- Exemplification of near-zero carbon institutions

## Low-carbon Plants - IPE Group



### Low-carbon Plants Benchmark

- Meeting the pressing need in carbon footprint in exports
- Carbon neutrality certification of Guangzhou Emissions Exchange

## Smart Energy Storage - Jiaxing, Zhejiang



### User-side Energy Storage

- High-safety energy storage products launched
- Invested by power grid company; a demonstration at the park



## Large-scale Industrial Parks

Projects Under Construction  
of Industrial Park : **2.4MW**



## Industrial Users

Hung Hom Industrial  
Building Project: **175KW**



## Business Users

Shatin Commercial Building  
Project: **150KW**

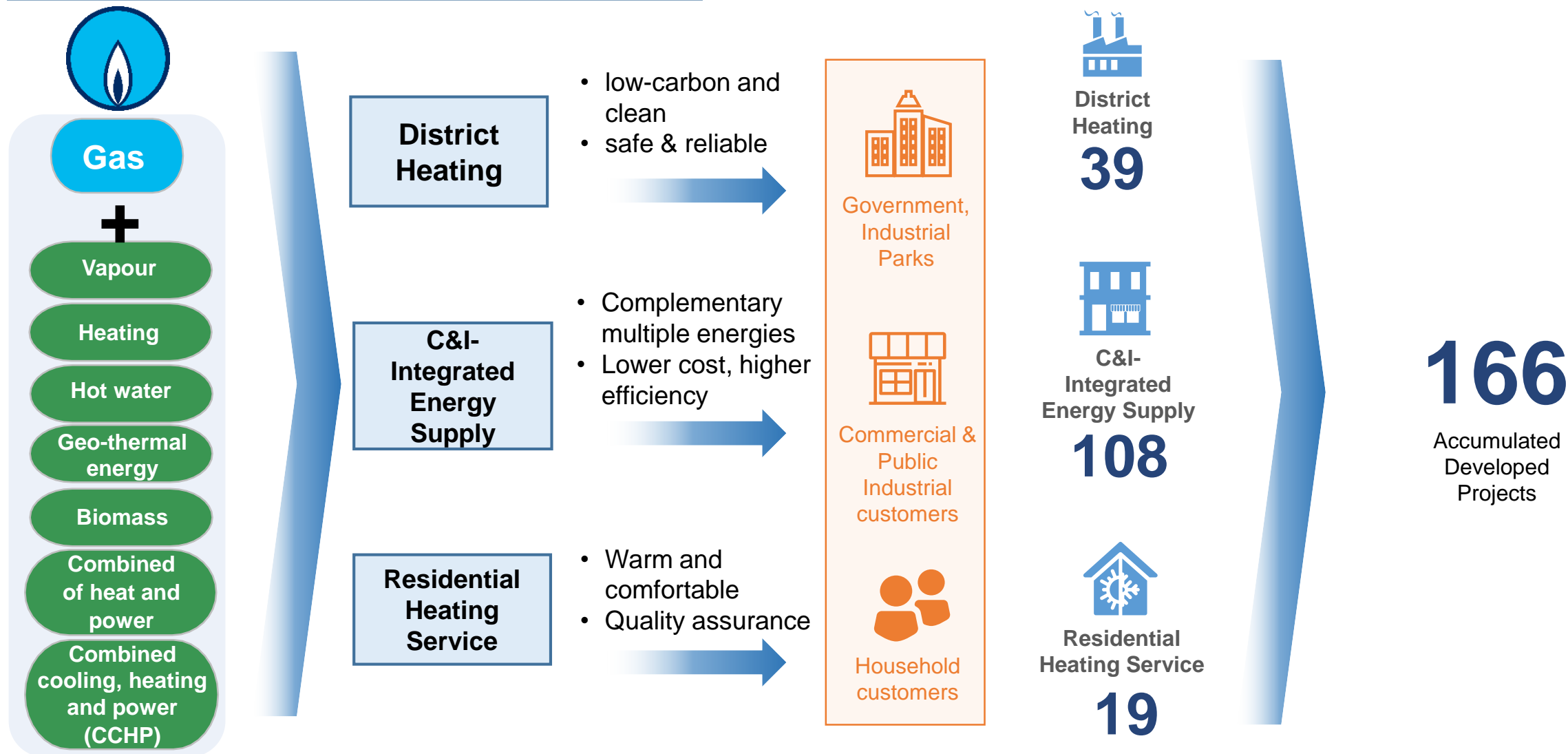


# BUSINESS REVIEW

- **Gas Business**
- **Smart Energy**
  - **Renewable Energy**
  - **“Gas+” Energy Management**

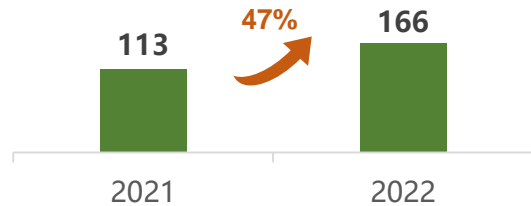
# “Gas+”: Intelligent Energy Management to Improve Efficiency and Reduce Costs

## Penetrate Energy Service Module

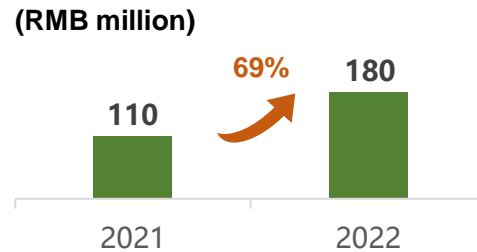


## Initial Results of Development

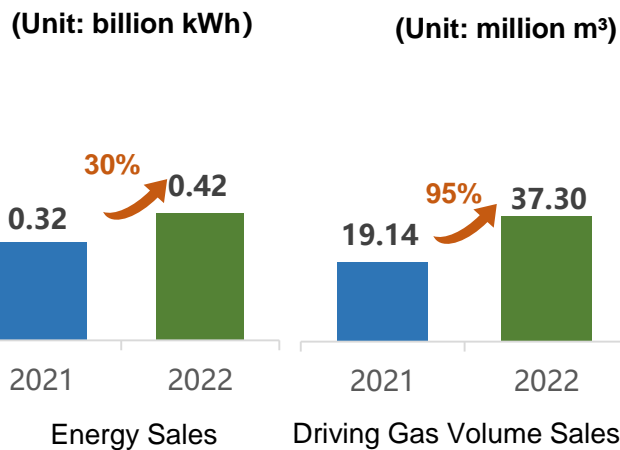
Numbers of Newly Developed Project Increased Rapidly



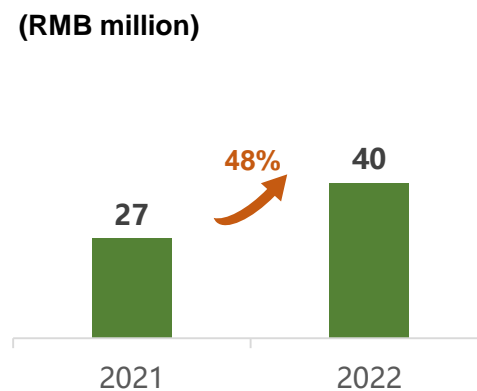
Revenue of Heating Service Increased Greatly



Synergic Increase in Energy and Gas Sales



Remarkable Gross Profit Growth in Heating Service



1.2 billion m<sup>3</sup> gas sales volume will be generated after 5 years

Enlarge the value of city gas assets  
Build new growth potential

**Comprehensive Green, Low Carbon Energy Service Solutions**

➤ National heat market capacity: **5 trillion kW**

District Heating

Individual Power Supply

Energy Custody

- Rich project reserve
- Robust operation areas

- 50,000+ key target customers
- Industry-leading partners

- Full process service capability
- High reliability & brand reputation





## Factory in Qingyuan

- **8 Tonnes of steam/hour** Gas Boiler+Pipe with high efficiency, saving industrial energy production cost

## Higher Vocational Education Industrial Park in Nanjing

- Air-sourcing + efficient Air Conditioning + Gas Condensing Boiler, covering the heating and cooling demand of **nearly 200,000** people



## Community in Wuhu

- High-efficient Gas Pump + Household Floor Heating construction providing a residential area of **140,000 sqm** with clean and reliable district heating service

## Industrial Park in Maanshan

- Gas + distributed energy franchise providing **25MW** for energy station, meeting steam and heating demand of the community



# Business Guidance





## City-gas

**Gas Sales Volume**

 **12%**

**New Connections**

 **900,000**

**Dollar Margin**

**0.52** RMB/m<sup>3</sup>



## Renewable Energy

**Zero-carbon Industrial Parks**

 **40**

**Accumulated PV  
Grid-connected Capacity**

**3** GW

**THANK YOU**

This presentation and corresponding discussion may contain certain forward- looking statements, including statements regarding our intent, belief or current expectations with respect to Towngas Smart Energy’s businesses and operations, market conditions, results of operation and financial condition, capital adequacy, specific provisions and risk management practices. Readers are cautioned not to place undue reliance on these forward looking statements in relation to holding, purchasing or selling securities or other financial products or instruments. Towngas Smart Energy does not undertake any obligation to publicly release the result of any revisions to these forward looking statements to reflect events or circumstances after the date hereof or the occurrence of unanticipated events. Past performance cannot be relied on as a guide for future performance.